

~~SECRET~~

1. J. [unclear]
Chase

NO FOREIGN DISSEM

CIA/RR CB 65-8
January 1965



Copy No.

171

LEJ LIBRARY

Mandatory Review

Case # NLJ 95-408

Document # 41

INTELLIGENCE BRIEF

CUBA PLANS NEW NATIONWIDE
HIGH-CAPACITY MICROWAVE SYSTEM

RECEIVED
H.S.C.
FEB 3 9 17 AM '65

DIRECTORATE OF INTELLIGENCE

Office of Research and Reports

NO FOREIGN DISSEM

~~SECRET~~

APPROVED FOR RELEASE

JUNE 1999

~~GROUP 1
Excluded from automatic
downgrading and
declassification~~

WARNING

~~THIS material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.~~

~~S-E-C-R-E-T~~

CUBA PLANS NEW NATIONWIDE
HIGH-CAPACITY MICROWAVE SYSTEM

The Cuban Minister of Communications has announced plans for a new, nationwide, high-capacity microwave radio relay system to be constructed during 1965-70. This new system will employ modern Hungarian equipment and will provide 600 telephone channels in addition to the relay of radio and television programs. If completed as scheduled, this new microwave system will meet Cuba's growing military and civilian demand for long-distance communications service by 1970. In the interim, however, long-distance service in Cuba will continue to suffer from inadequate system capacity.

1. Status of Long-Distance Communications Facilities

The principal long-distance communications facilities in Cuba consist of a 24-telephone-channel military microwave network, installed by the Radio Corporation of America in 1957, that spans the entire island; a microwave network, installed by the Philco Corporation in 1954-58, that runs from Havana eastward to Santiago de Cuba and is used to relay television programs and eight telephone channels; and low-capacity open-wireline networks for telephone and telegraph service. Although these networks have been maintained at a reasonable state of operational effectiveness since Castro assumed power in 1959, their capacity has not been expanded to meet the growing military, governmental, and public demand for long-distance communications service.

Plans for increasing the number of long-distance communications channels by adding carrier equipment to the telephone wireline network were formulated with Hungary in 1960. Unforeseen technical difficulties in addition to delays in the delivery of equipment, however, have repeatedly frustrated the Cuban authorities, and consequently the expansion plan already is years behind schedule. The problems encountered apparently have been serious enough to force Cuba in recent months to use its limited foreign exchange resources to procure critical items of equipment from the Free World. In August 1964, Cuban authorities signed a contract with a Belgian firm for more than 50 kilometers of long-distance telephone cable, and in September 1964 negotiations were undertaken with Marconi Wireless Telegraph Company of Italy for 12-telephone-channel carrier equipment.

~~S-E-C-R-E-T~~

2. Recent Plans

In a radio interview on 6 January 1965 the Cuban Minister of Communications, Major Jesus Montane Oropeza, announced that work would begin in 1965 on a nationwide microwave radio relay network that would be completed in 1970. He disclosed that this new network would serve all six provinces, including the Isle of Pines, and would provide 600 telephone channels in addition to the relay of television and radio programs.

The announcement of this project followed Montane's recent tour of the USSR and Hungary. The report that his visit to Hungary included discussions concerning the acquisition of communications equipment, as well as Cuba's past interest in acquiring a high-capacity microwave system from Hungary, indicates that equipment of the GTT-4000 type, which operates in the 4,000-megacycle range, will be used. This Hungarian microwave equipment is designed to supply up to six radio-frequency trunks, each of which can be used to carry either 600 simultaneous telephone conversations or one television program. Initial Cuban requirements can be met with three radiofrequency trunks -- one for television relay, one for the transmission of 600 telephone channels, and one for standby. The remaining three radiofrequency trunks can be added as needed to meet future demands for expansion of the system.

3. Outlook

Cuba's planned microwave system might be available for the relay of television and radio programs as early as 1968. It is doubtful, however, that telephone service will be available before 1970, for Hungary, along with other Soviet Bloc countries, has not yet mastered production of the carrier equipment needed for the division of radiofrequency trunks into 600 telephone channels.

The impact that the new microwave system will have on existing microwave networks in Cuba is not clear. It is probable that the Philco television relay network will be replaced by the new system, but the military network may be retained in the interest of diversifying communications. In any event, the physical facilities of either the military or the Philco system might be used if they can be modified to accommodate the GTT-4000 transmission equipment. If such a modification is possible, it would reduce substantially the estimated cost of US \$6 million for constructing and equipping a totally new network.


~~S-E-C-R-E-T~~

If the plans for the installation of the GTT-4000 and associated carrier equipment are fully realized in 1970, the new microwave network will provide the necessary channel capacity to meet Cuba's requirements for long-distance communications. Furthermore, through the addition of three radiofrequency trunks, the capacity of the system can be expanded readily to meet future demands. In the interim period between 1965 and 1970, however, it is likely that the inadequacy of long-distance communications facilities will remain a pressing problem.

Sources:

1. FBIS. Daily Report (Latin America), 8 Jan 65, p. hhhh3 - hhhh4. OFF USE.
2. CIA. CIA/RR EP 60-73, Electronics Facilities in Cuba, 1 Nov 60. S.
3. CIA. CIA/RR EP 63-5, Electronics Facilities in Cuba (Supplement), Jan 63. S/NO FOREIGN DISSEM.

1.5(c)
3.4(b)(1)



- 3 -

~~S-E-C-R-E-T~~